

KS2 rolling programme - Science and Humanities

Year and KS2 over-arching topics	Autumn 2021	Spring 2022	Summer 2022	Autumn 2022	Spring 2023	Summer 2023	Autumn 2023	Spring 2024	Summer 2024	Autumn 2024	Spring 2025	Summer 2025
	Victorians Inventions	Ancient Rome Earth and Space	Staying Alive Our sporting heroes	Dartmoor WW1/2	Africa Midsummer Night's Dream	Sir Robert Geffery's Waters of the World	Invaders/Settlers and Vikings Light and Sound	Brazil Charles Dickens/Oliver/Victorians	Cornwall and the Tamar SRG Olympians	Ancient Greece Fun and Festivals	Macbeth Ancient Egypt	Food and Farming Plants and Habitats
Science Topic 1	<p>Electricity - linked to Thomas Edison</p> <p>All - circuit diagrams, safety, predictions about circuits, conductors /insulators.</p> <p>Year 3/4 - making switches</p> <p>Year 5/6 - linking changing circuits to voltage</p>	<p>Properties of materials with a link to Romans.</p> <p>Designing Absorbency test for the best toga.3/4</p> <p>Designing solubility tests - a cup of tea for the emperor!</p>	<p>Human Body</p> <p><u>Year 3/4</u></p> <p>Teeth and microorganisms.</p> <p><u>Year 5/6 -</u></p> <p>The heart and circulatory system</p>	<p>Forces related to magnetism</p> <p>Attract/repel</p> <p>Poles</p> <p>Uses of magnets</p> <p>Magnetic fields - relate to rocks and compasses - map skills in geography</p>	<p>Evolution and Inheritance - link to African animals and Darwin</p>	<p>Classification with link to the local area and school grounds</p>	<p>Forces - boats and buoyancy linked to forces and water resistance - Viking longships</p>	<p>Food chains - link to Brazilian animals and issues of habitat destruction - link to Google Earth and satellite images of rainforests.</p>	<p>Electricity with a sustainability link</p> <p>Alternative forms of energy and their advantages /disadvantages.</p> <p>Building circuits</p> <p>Year 4 - making switches</p> <p>Year 5 linking changing circuits to voltage</p>	<p>Human body</p> <p><u>Year 3/4</u></p> <p>Teeth and micro-organisms</p> <p><u>Year 5/6</u></p> <p>The heart and the circulatory system -</p>	<p>Year 3/4 Reflection and shadows with a link to stage lighting/shadow puppets</p> <p>Year 5/6 How we see - structure of the eye How light travels. Seeing colour Prisms</p>	<p>Plants with a farming link</p> <p>Parts of a plant Requirements for growth Pollination and reproduction</p>

W/s skill - interwoven throughout but specific skills focused on in each term Differentiated between upper and lower KS2 as per national curriculum Developing the use of PSTT symbols	Asking questions and planning	Results - presenting data	Concluding and analysing	Asking questions and planning	Results - presenting data	Concluding and analysing	Asking questions and planning	Results - presenting data	Concluding and analysing	Asking questions and planning	Results - presenting data	Concluding and analysing
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<https://pstt.org.uk/resources/curriculum-materials/enquiry-skills>

Related Scientist (Balance of gender and ethnicity)	Thomas Edison - the invention of the lightbulb - link to resilience!		Marie Curie - the discovery of radiation and contribution to xrays (2nd half)	Jane Goodall - conservationist (2nd half)	Charles Darwin - theory of evolution (1st half)		Archimede s - Eureka moment! (1st half)	Mary Anning - scientist and fossil hunter (2nd half)	Maria Merian - artist and entomologist - artist with a link to butterflies (2nd half)	Plato/Copernicus/ Galileo/Indigenous Australians Stephen Hawking (2nd half)		Botanist - George Washington-Carver (1st half) Carl Linnaeus - taxonomy and classification (2nd half)
Science Topic 2	Electricity	The water cycle - with a link to properties of materials in first half	Nutrition/skeletons and muscles	Habitat destruction - comparing 1914 to now	Light - Year 3/4 Reflection and shadows with a link to stage lighting/sh	Reversible and irreversible change	Sound	Rocks with a link to Mary Anning	Human and animal life cycles - compare and contrast Gestation periods of	Earth and Space - continue the Ancient Greek theme including theories	Forces and simple machines linked to pyramid building and inclined	Classification of plants and animals - school grounds link - Branching databases

					adow puppets					different animals	geocentric and heliocentric theories	planes/pulleys	
					Year % How we see - structure of the eye How light travels. Seeing colour Prisms								

Further information on developing science capital and modern day/ historical scientists - https://www.ase.org.uk/system/files/journal-issue/documents/Primary%20Science%20151_0.pdf

Science weeks - there are 2 adjacent weeks in February just before half term. This follows the theme of British Science Week for that particular year and encourages practical investigation with own classteachers. As this is the term in which data skills are being developed, teachers will also make strong links to maths and producing charts and data in an age appropriate manner.

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History topic	Victorians and inventions that shaped the World -	Why were the Romans so powerful? What did we learn from them?	Famous people from British history Advances in medicine	Stone age to the Iron Age - chronolog y	Benin - why is the Kingdom of Benin so important ?	A local study on Landrake and the importance of Sir Robert Geffery in the community	<u>1st half</u> Anglo Saxon kingdoms and settlements And other elements from the NC	<u>2nd half</u> The chronology of Victorian Britain with a focus on the growth of the British Empire	Brunel study - how did Brunel shape modern	Ancient Greeks study - Greek life, achieveme nts and influence	Overview of early civilizatio ns with a focus on Ancient Egypt.	Local study - history and farming within Cornwall with a focus

	<p>A time of change - the Great Exhibition</p> <p>Emmeline Pankhurst and the suffragettes</p>	<p>The Roman Army and British resistance - Boudica</p>	<p>Edward Jenner Alexander Fleming Florence Nightingale</p>	<p>The Bronze Age - how has Dartmoor changed over the years? Merrivale, Grimspound</p> <p>Field work and site visit</p> <p>Opportunity to explore primary sources</p>	<p>Africa case studies</p>	<p>Primary sources study - use churchyard/census information/maps -</p>	<p>2nd half</p> <p>Viking and Anglo-Saxon struggle for England - up to Edward the Confessor</p>	<p>Queen Victoria - Empress of India</p>	<p>day Britain?</p> <p>Royal Albert Bridge visit/Saltash Heritage</p> <p>Box Hill Tunnel SS Great Britain/Great Eastern</p>	<p>on western world.</p> <p>Plato Pythagoras Archimedes Alexander the Great</p>	<p>Rulers, culture, language, beliefs.</p> <p>Cleopatra</p>	<p>on Landrake.</p>
<p>Geography topic - 2nd half</p>	<p>Cities within the UK - where are they?</p> <p>Compare sizes and development from Victorian times</p>	<p>Map skills - capital cities around Europe and the World (inc Russia)</p> <p>Volcanoes and earthquakes with a link to Romans and Vesuvius/Pompeii - Pliny the Younger</p> <p>Use Google Earth and discuss use of global mapping using satellites</p>	<p>World sporting heroes - Edmund Hillary/Sherpa Tensing Junko Tabei- conditions at altitude and Everest</p> <p>The training of modern day athletes around the world linked to altitude/climate</p>	<p>Geography of Dartmoor - location, size and key geographical features - link to ordnance survey and compass work. 4/6 figure grid referencing</p> <p>Field work visit to Dartmoor</p>	<p>Countries within Africa.</p> <p>A study of Uganda related to Ikona and Hillside School</p>	<p>The water cycle and making rain gauges and monitoring the weather.</p> <p>Coastal erosion</p> <p>Field work visit - Seaton/Downberry</p>		<p>1st half</p> <p>A study of South Eastern Brazil inc Rio de Janeiro- link to place knowledge of other familiar locations studied - human and physical geography - link to Attica later in the year</p>	<p>Time zones linked to the Olympics topic. Key locational knowledge ie tropics, equator, hemispheres, meridians.</p>	<p>Study of Attica in Greece (in which Athens sits) - compare to Brazil earlier in the year Human and physical geography</p>	<p>Focus on the importance of the River Nile now and in the past (builds from 1st half)</p> <p>Use Google Earth and maps to investigate the change in Egypt</p>	<p>Food and farming contrast between Landrake and Ikona, Uganda - look at farming methods used and developments</p> <p>Field work visit - Markwell Farm other local farms. Link with Ikona to see</p>

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